

REMARKS

This application has been reviewed in light of the Office Action dated February 17, 2006. Claims 25-27, 29-34, 36-41 and 43-45 are pending in this application, of which Claims 25, 32 and 39 are in independent form. Claims 25, 31, 32, 38, 39 and 45 have been amended to define still more clearly what Applicants regard as their invention.

In the outstanding Office Action, Claims 25-27, 29-34, 36-41 and 43-45 were rejected under 35 U.S.C. § 103(a) as being obvious from U.S. Patent 5,077,811 (Onda) in view of U.S. Patent 6,266,162 B1 (Okamura et al.).

Independent Claim 25 is directed to an image processing method for processing an input document image, which comprises displaying an instruction input window to receive both of a first instruction and a second instruction from a user, where the first instruction indicates whether the orientation of the document image should be corrected automatically or manually, and the second instruction indicates whether or not a tilt of the document image should be automatically corrected (see, for example, Fig. 3 of the present application).^{1/} Based on the first instruction received in the instruction input window, a determination is made as to whether the user has instructed that the orientation of the document image should be corrected automatically or manually, and an automatic discrimination is made of the orientation of the document image as one of 0, 90, 180 and 270 degrees, *if* it is determined in the determining step that the user has instructed that the orientation of the document image should be automatically corrected; in such case, the document image is automatically rotated, based on the discriminated orientation of the document image. If on the other hand it is determined in the determining step that the user has instructed that the orientation of the document image should be manually corrected, then the document image is rotated according to a rotation angle of one of 0, 90, 180 and

^{1/} It is of course to be understood that the claim scope is not limited by the details of this or any other particular embodiment that may be referred to.

270 degrees instructed by the user. moreover, if it is determined based on the second instruction that the tilt of the document image is to be automatically corrected, then the tilt of the document image, which is rotated in either the automatic rotating step or the (non-automatic) rotating step, is corrected automatically. According to Claim 25, the automatic correction step does *not* execute automatic correction of the tilt of the document image which is rotated in the automatic rotating step or the rotating step if it is determined based on the second instruction that the tilt of the document image should not be automatically corrected.

By virtue of the method of Claim 25, therefore, it is possible to receive from a user both the first instruction, which indicates whether the orientation of a document image should be corrected automatically or manually, and the second instruction, which indicates whether or not the tilt of the document image should be automatically corrected, via the instruction input window. If the second instruction indicates that the tilt of the document image should be automatically corrected, then the tilt of the document image is automatically corrected, after the document image has been rotated, either automatically or manually, by one of 0, 90, 180 and 270 degrees. If the second instruction indicates that the tilt of the document image should not be automatically corrected, on the other hand, then the tilt correction is not executed; even in this case, however, the document image has been automatically or manually rotated.

In other words, the method of Claim 25 realizes for the user the ability to select among the following four types of processing based on the single instruction input window recited in the displaying step:

(1) automatic rotation and automatic tilt correction are executed (if the first instruction designates the automatic rotation and the second instruction designates the automatic tilt correction);

(2) automatic rotation is executed without tilt correction (if the first instruction designates the automatic rotation and the second instruction does not designate the automatic tilt correction);

(3) manual rotation and automatic tilt correction are executed (if the first instruction designates the manual rotation and the second instruction designates the automatic tilt correction); and

(4) manual rotation is executed, without tilt correction (if the first instruction designates the manual rotation and the second instruction does not designate the automatic tilt correction).

Onda shows automatically correcting the orientation of a document image by one of 0, 90, 180 and 270 degrees. In *Onda* an automatic determination can be made as to whether an image on a document needs to be rotated, based on character recognition, and if rotation is deemed necessary, the *Onda* apparatus rotates the image data by the required angle in the required direction. Nonetheless, Applicants submit that nothing has been found, or pointed out, in *Onda* that would teach or suggest making a tilt correction, as recited in Claim 25. Applicants respectfully point out that that claim makes provision, as described above, for both (a) orientation correction, and separately, for (b) tilt correction. Applicants throughout the present specification and figures have maintained a clear distinction between these two, and have provided an explicit definition of “tilt correction” (see page 14). That is, the method of Claim 25 makes provision both for correcting orientation if need be – that is, rotating the image by 90 degrees, or 180 degrees, or 270 degrees – and *also* for correcting tilt – that is, correcting for the presence of any relatively slight in accuracy in the direction of the document, such as normally occurs due to a document being placed on a platen carelessly, or being fed through an automatic document feeder unevenly. Nothing in *Onda* is seen to relate to correction of tilt, or indeed to make provision for any re-arrangement of the image other than by a rotation of 90, 180 or 270

degrees. For at least this reason, therefore, it is believed clear that Claim 25 is allowable over *Onda* taken alone.

Moreover, Applicants note the statement in the Office Action that *Onda* does not teach or suggest the recited displaying step, of displaying an instruction panel that permits a user to input (1) an instruction for automatic correction of orientation, where that is desired, and (2) an instruction for automatic correction of tilt, where that is desired. Applicants agree that no such display is suggested by *Onda*, but strongly urge that that patent lacks not mere the display for the input of these two types of instructions, but in fact is altogether lacking in any suggestion relating to tilt or tilt correction, much less displaying a panel to receive an instruction relating to tilt.

Okamura shows an operation panel on which the user can enter a desired instruction. Even if *Okamura* is deemed to teach all that it is cited for, however, and even assuming that the proposed combination with *Onda* would be a permissible one, the result of such combination would still not meet the terms of Claim 25: Nothing has been found in either patent that would suggest any concern with inaccuracies in tilt, as opposed to orientation, much less any way to effect automatic correction of tilt, as recited in Claim 25, and still less displaying an instruction panel that permits a user to input instructions relating, respectively, to (1) orientation correction and (2) tilt correction, as is also recited in Claim 25.

For all these reasons, therefore, Claim 25 is believed to be allowable over *Okamura* and *Onda*, taken separately or in any permissible combination (if any).

Independent Claims 32 and 39 are apparatus and computer-readable storage medium claims, respectively, corresponding to method Claim 25, and are believed to be patentable over *Onda* and *Okamura* for at least the same reasons as discussed above in connection with Claim 25.

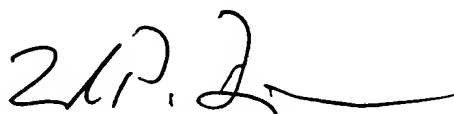
A review of the other art of record has failed to reveal anything which, in Applicants' opinion, would remedy the deficiencies of the art discussed above, as references against the independent claims herein. Those claims are therefore believed patentable over the art of record.

The other claims in this application are each dependent from one or another of the independent claims discussed above and are therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual consideration or reconsideration, as the case may be, of the patentability of each on its own merits is respectfully requested.

In view of the foregoing amendments and remarks, Applicants respectfully request favorable reconsideration and early passage to issue of the present application.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our address given below.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "L.P. Diana", with a long horizontal flourish extending to the right.

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